

*D. Roneo (Roneo)*

*1647 RUSH*

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/263,022

**ENTERED**

CRF Processing Date: 5/7/2001

Edited by: \_\_\_\_\_

Verified by: Ar

(STIC staff)

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☒ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: 16, 26
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/263,022

DATE: 05/07/2001

TIME: 13:18:48

Input Set : A:\Pto.amc

Output Set: N:\CRF3\05072001\I263022.raw

P.S

2 <110> APPLICANT: McCarthy, Sean A.  
 4 <120> TITLE OF INVENTION: NOVEL HUMAN DICKKOPF-RELATED PROTEIN AND NUCLEIC ACID  
 5 MOLECULES AND USES THEREFOR  
 7 <130> FILE REFERENCE: MNI-108CP2  
 9 <140> CURRENT APPLICATION NUMBER: 09/263,022  
 10 <141> CURRENT FILING DATE: 1999-03-05  
 12 <150> PRIOR APPLICATION NUMBER: 08/843,704  
 13 <151> PRIOR FILING DATE: 1997-04-16  
 15 <150> PRIOR APPLICATION NUMBER: 08/842,898  
 16 <151> PRIOR FILING DATE: 1997-04-17  
 18 <150> PRIOR APPLICATION NUMBER: 60/071,589  
 19 <151> PRIOR FILING DATE: 1998-01-15  
 21 <150> PRIOR APPLICATION NUMBER: 09/009,802  
 22 <151> PRIOR FILING DATE: 1998-01-20  
 24 <160> NUMBER OF SEQ ID NOS: 38  
 26 <170> SOFTWARE: PatentIn Ver. 2.0  
 28 <210> SEQ ID NO: 1  
 29 <211> LENGTH: 2479  
 30 <212> TYPE: DNA  
 31 <213> ORGANISM: Homo sapiens  
 33 <220> FEATURE:  
 34 <221> NAME/KEY: CDS  
 35 <222> LOCATION: (38)..(1087)  
 37 <220> FEATURE:  
 38 <223> OTHER INFORMATION: 'n' at position 1146 may be any nucleotide  
 40 <400> SEQUENCE: 1  
 41 ggcacgaggg ggcggcggct gcgggcgcag agcggag atg cag cgg ctt ggg gcc 55  
 42 Met Gln Arg Leu Gly Ala  
 43 1 5  
 45 acc ctg ctg tgc ctg ctg ctg gcg gcg gcg gtc ccc acg gcc ccc gcg 103  
 46 Thr Leu Leu Cys Leu Leu Leu Ala Ala Val Pro Thr Ala Pro Ala  
 47 10 15 20  
 49 ccc gct ccg acg gcg acc tcg gct cca gtc aag ccc ggc ccg gct ctc 151  
 50 Pro Ala Pro Thr Ala Thr Ser Ala Pro Val Lys Pro Gly Pro Ala Leu  
 51 25 30 35  
 53 agc tac ccg cag gag gag gcc acc ctc aat gag atg ttc cgc gag gtt 199  
 54 Ser Tyr Pro Gln Glu Glu Ala Thr Leu Asn Glu Met Phe Arg Glu Val  
 55 40 45 50  
 57 gag gaa ctg atg gag gac acg cag cac aaa ttg cgc agc gcg gtg gaa 247  
 58 Glu Glu Leu Met Glu Asp Thr Gln His Lys Leu Arg Ser Ala Val Glu  
 59 55 60 65 70  
 61 gag atg gag gca gaa gaa gct gct gct aaa gca tca tca gaa gtg aac 295  
 62 Glu Met Glu Ala Glu Ala Ala Lys Ala Ser Ser Glu Val Asn  
 63 75 80 85  
 65 ctg gca aac tta cct ccc agc tat cac aat gag acc aac aca gac acg 343  
 66 Leu Ala Asn Leu Pro Pro Ser Tyr His Asn Glu Thr Asn Thr Asp Thr  
 67 90 95 100

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/263,022

DATE: 05/07/2001

TIME: 13:18:48

Input Set : A:\Pto.amc

Output Set: N:\CRF3\05072001\I263022.raw

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69 aac gtt gga aat aat acc atc cat gtg cac cga gaa att cac aag ata 391
70 Asn Val Gly Asn Asn Thr Ile His Val His Arg Glu Ile His Lys Ile
71      105      110      115
73 acc aac aac cag act gga caa atg gtc ttt tca gag aca gtt atc aca 439
74 Thr Asn Asn Gln Thr Gly Gln Met Val Phe Ser Glu Thr Val Ile Thr
75      120      125      130
77 tct gtg gga gac gaa gaa ggc aga agg agc cac gag tgc atc atc gac 487
78 Ser Val Gly Asp Glu Glu Gly Arg Arg Ser His Glu Cys Ile Ile Asp
79 135      140      145      150
81 gag gac tgt ggg ccc agc atg tac tgc cag ttt gcc agc ttc cag tac 535
82 Glu Asp Cys Gly Pro Ser Met Tyr Cys Gln Phe Ala Ser Phe Gln Tyr
83      155      160      165
85 acc tgc cag cca tgc cgg ggc cag agg atg ctc tgc acc cgg gac agt 583
86 Thr Cys Gln Pro Cys Arg Gly Gln Arg Met Leu Cys Thr Arg Asp Ser
87      170      175      180
89 gag tgc tgt gga gac cag ctg tgt gtc tgg ggt cac tgc acc aaa atg 631
90 Glu Cys Cys Gly Asp Gln Leu Cys Val Trp Gly His Cys Thr Lys Met
91      185      190      195
93 gcc acc agg ggc agc aat ggg acc atc tgt gac aac cag agg gac tgc 679
94 Ala Thr Arg Gly Ser Asn Gly Thr Ile Cys Asp Asn Gln Arg Asp Cys
95      200      205      210
97 cag ccg ggg ctg tgc tgt gcc ttc cag aga ggc ctg ctg ttc cct gtg 727
98 Gln Pro Gly Leu Cys Cys Ala Phe Gln Arg Gly Leu Leu Phe Pro Val
99 215      220      225      230
101 tgc aca ccc ctg ccc gtg gag ggc gag ctt tgc cat gac ccc gcc agc 775
102 Cys Thr Pro Leu Pro Val Glu Gly Glu Leu Cys His Asp Pro Ala Ser
103      235      240      245
105 cgg ctt ctg gac ctc atc acc tgg gag cta gag cct gat gga gcc ttg 823
106 Arg Leu Leu Asp Leu Ile Thr Trp Glu Leu Glu Pro Asp Gly Ala Leu
107      250      255      260
109 gac cga tgc cct tgt gcc agt ggc ctc ctc tgc cag ccc cac agc cac 871
110 Asp Arg Cys Pro Cys Ala Ser Gly Leu Leu Cys Gln Pro His Ser His
111      265      270      275
113 agc ctg gtg tat gtg tgc aag ccg acc ttc gtg ggg agc cgt gac caa 919
114 Ser Leu Val Tyr Val Cys Lys Pro Thr Phe Val Gly Ser Arg Asp Gln
115      280      285      290
117 gat ggg gag atc ctg ctg ccc aga gag gtc ccc gat gag tat gaa gtt 967
118 Asp Gly Glu Ile Leu Leu Pro Arg Glu Val Pro Asp Glu Tyr Glu Val
119 295      300      305      310
121 ggc agc ttc atg gag gag gtg cgc cag gag ctg gag gac ctg gag agg 1015
122 Gly Ser Phe Met Glu Glu Val Arg Gln Glu Leu Glu Asp Leu Glu Arg
123      315      320      325
125 agc ctg act gaa gag atg gcg ctg agg gag cct gcg gct gcc gcc gct 1063
126 Ser Leu Thr Glu Glu Met Ala Leu Arg Glu Pro Ala Ala Ala Ala Ala
127      330      335      340
129 gca ctg ctg gga agg gaa gag att tagatctgga ccaggctgtg ggtagatgtg 1117
130 Ala Leu Leu Gly Arg Glu Glu Ile
131      345      350
133 caatagaaat agctaattta tttccccang tgtgtgcttt aagcgtgggc tgaccaggct 1177

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/263,022

DATE: 05/07/2001

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Input Set : A:\Pto.amc

Output Set: N:\CRF3\05072001\I263022.raw

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135 tcttcctaca tcttcttccc agtaagtttc cctcttggtg tgacagcatg aggtggtgtg 1237
137 catttggtca gctccccag gctgttctcc aggttcaca gctgtgtgct tgggagagtc 1297
139 aggcagggtt aaactgcagg agcagtttgc caccctgtc cagattattg gctgctttgc 1357
141 ctctaccagt tggcagacag ccgtttgttc tacatggctt tgataattgt ttgaggggag 1417
143 gagatggaaa caatgtggag tctccctctg attggttttg gggaaatgtg gagaagagtg 1477
145 ccctgctttg caaacatcaa cctggcaaaa atgcaacaaa tgaattttcc acgcagttct 1537
147 ttccatgggc ataggttaagc tgtgccttca gctgttgagc atgaaatgtt ctgttcaccc 1597
149 tgcattacat gtgtttattc atccagcagt gttgctcagc tcctacctct gtgccagggc 1657
151 agcattttca tatccaagat caattccctc tctcagcaca gcctggggag ggggtcattg 1717
153 ttctcctcgt ccatcaggga tttcagaggc tcagagactg caagctgctt gcccaagtca 1777
155 cacagctagt gaagaccaga gcagtttcat ctggttggtg ctctaagctc agtgctctct 1837
157 ccaactacccc acaccagcct tgggtccacc aaaagtgtc cccaaaagga aggagaatgg 1897
159 gatttttctt ttgaggcatg cacatctgga attaaggtca aactaattct cacatccctc 1957
161 taaaagtaaa ctactgttag gaacagcagt gttctcacag tgtggggcag ccgtccttct 2017
163 aatgaagaca atgatattga cactgtccct ctttggcagt tgcattagta actttgaaag 2077
165 gtatatgact gagcgtagca tacagggtta cctgcagaaa cagtacttag gtaattgtag 2137
167 ggcgaggatt ataaatgaaa tttgcaaaat cacttagcag caactgaaga caattatcaa 2197
169 ccacgtggag aaaatcaaac cgagcagggc tgtgtgaaac atggttgtaa tatgcgactg 2257
171 cgaacactga actctacgcc actccacaaa tgatgttttc aggtgtcatg gactgttgcc 2317
173 accatgtatt catccagagt tcttaaagtt taaagttgca catgattgta taagcatgct 2377
175 ttctttgagt tttaaattat gtataaacat aagttgcatt tagaaatcaa gcataaatca 2437
177 cttcaactgc taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 2479

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180 &lt;210&gt; SEQ ID NO: 2

181 &lt;211&gt; LENGTH: 350

182 &lt;212&gt; TYPE: PRT

183 &lt;213&gt; ORGANISM: Homo sapiens

185 &lt;400&gt; SEQUENCE: 2

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186 Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala Ala
187 1 5 10 15
189 Val Pro Thr Ala Pro Ala Pro Ala Thr Ala Thr Ser Ala Pro Val
190 20 25 30
192 Lys Pro Gly Pro Ala Leu Ser Tyr Pro Gln Glu Glu Ala Thr Leu Asn
193 35 40 45
195 Glu Met Phe Arg Glu Val Glu Glu Leu Met Glu Asp Thr Gln His Lys
196 50 55 60
198 Leu Arg Ser Ala Val Glu Met Glu Ala Glu Glu Ala Ala Ala Lys
199 65 70 75 80
201 Ala Ser Ser Glu Val Asn Leu Ala Asn Leu Pro Pro Ser Tyr His Asn
202 85 90 95
204 Glu Thr Asn Thr Asp Thr Asn Val Gly Asn Asn Thr Ile His Val His
205 100 105 110
207 Arg Glu Ile His Lys Ile Thr Asn Gln Thr Gly Gln Met Val Phe
208 115 120 125
210 Ser Glu Thr Val Ile Thr Ser Val Gly Asp Glu Glu Gly Arg Arg Ser
211 130 135 140
213 His Glu Cys Ile Ile Asp Glu Asp Cys Gly Pro Ser Met Tyr Cys Gln
214 145 150 155 160
216 Phe Ala Ser Phe Gln Tyr Thr Cys Gln Pro Cys Arg Gly Gln Arg Met
217 165 170 175

```

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Input Set : A:\Pto.amc

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```

219 Leu Cys Thr Arg Asp Ser Glu Cys Cys Gly Asp Gln Leu Cys Val Trp
220                               180                               185                               190
222 Gly His Cys Thr Lys Met Ala Thr Arg Gly Ser Asn Gly Thr Ile Cys
223                               195                               200                               205
225 Asp Asn Gln Arg Asp Cys Gln Pro Gly Leu Cys Cys Ala Phe Gln Arg
226                               210                               215                               220
228 Gly Leu Leu Phe Pro Val Cys Thr Pro Leu Pro Val Glu Gly Glu Leu
229 225                               230                               235                               240
231 Cys His Asp Pro Ala Ser Arg Leu Leu Asp Leu Ile Thr Trp Glu Leu
232                               245                               250                               255
234 Glu Pro Asp Gly Ala Leu Asp Arg Cys Pro Cys Ala Ser Gly Leu Leu
235                               260                               265                               270
237 Cys Gln Pro His Ser His Ser Leu Val Tyr Val Cys Lys Pro Thr Phe
238                               275                               280                               285
240 Val Gly Ser Arg Asp Gln Asp Gly Glu Ile Leu Leu Pro Arg Glu Val
241                               290                               295                               300
243 Pro Asp Glu Tyr Glu Val Gly Ser Phe Met Glu Glu Val Arg Gln Glu
244 305                               310                               315                               320
246 Leu Glu Asp Leu Glu Arg Ser Leu Thr Glu Glu Met Ala Leu Arg Glu
247                               325                               330                               335
249 Pro Ala Ala Ala Ala Ala Ala Leu Leu Gly Arg Glu Glu Ile
250                               340                               345                               350
253 <210> SEQ ID NO: 3
254 <211> LENGTH: 1050
255 <212> TYPE: DNA
256 <213> ORGANISM: Homo sapiens
258 <220> FEATURE:
259 <221> NAME/KEY: CDS
260 <222> LOCATION: (1)..(1050)
262 <400> SEQUENCE: 3
263 atg cag cgg ctt ggg gcc acc ctg ctg tgc ctg ctg ctg gcg gcg gcg 48
264 Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala Ala
265 1 5 10 15
267 gtc ccc acg gcc ccc gcg ccc gct ccg acg gcg acc tcg gct cca gtc 96
268 Val Pro Thr Ala Pro Ala Pro Ala Pro Thr Ala Thr Ser Ala Pro Val
269 20 25 30
271 aag ccc ggc ccg gct ctc agc tac ccg cag gag gag gcc acc ctc aat 144
272 Lys Pro Gly Pro Ala Leu Ser Tyr Pro Gln Glu Glu Ala Thr Leu Asn
273 35 40 45
275 gag atg ttc cgc gag gtt gag gaa ctg atg gag gac acg cag cac aaa 192
276 Glu Met Phe Arg Glu Val Glu Glu Leu Met Glu Asp Thr Gln His Lys
277 50 55 60
279 ttg cgc agc gcg gtg gaa gag atg gag gca gaa gaa gct gct gct aaa 240
280 Leu Arg Ser Ala Val Glu Glu Met Glu Ala Glu Glu Ala Ala Ala Lys
281 65 70 75 80
283 gca tca tca gaa gtg aac ctg gca aac tta cct ccc agc tat cac aat 288
284 Ala Ser Ser Glu Val Asn Leu Ala Asn Leu Pro Pro Ser Tyr His Asn
285 85 90 95
287 gag acc aac aca gac acg aac gtt gga aat aat acc atc cat gtg cac 336

```

## RAW SEQUENCE LISTING

DATE: 05/07/2001

PATENT APPLICATION: US/09/263,022

TIME: 13:18:49

Input Set : A:\Pto.amc

Output Set: N:\CRF3\05072001\I263022.raw

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288 Glu Thr Asn Thr Asp Thr Asn Val Gly Asn Asn Thr Ile His Val His
289                               100                               105                               110
291 cga gaa att cac aag ata acc aac cag act gga caa atg gtc ttt 384
292 Arg Glu Ile His Lys Ile Thr Asn Asn Gln Thr Gly Gln Met Val Phe
293                               115                               120                               125
295 tca gag aca gtt atc aca tct gtg gga gac gaa gaa ggc aga agg agc 432
296 Ser Glu Thr Val Ile Thr Ser Val Gly Asp Glu Glu Gly Arg Arg Ser
297                               130                               135                               140
299 cac gag tgc atc atc gac gag gac tgt ggg ccc agc atg tac tgc cag 480
300 His Glu Cys Ile Ile Asp Glu Asp Cys Gly Pro Ser Met Tyr Cys Gln
301 145                               150                               155                               160
303 ttt gcc agc ttc cag tac acc tgc cag cca tgc cgg ggc cag agg atg 528
304 Phe Ala Ser Phe Gln Tyr Thr Cys Gln Pro Cys Arg Gly Gln Arg Met
305                               165                               170                               175
307 ctc tgc acc cgg gac agt gag tgc tgt gga gac cag ctg tgt gtc tgg 576
308 Leu Cys Thr Arg Asp Ser Glu Cys Cys Gly Asp Gln Leu Cys Val Trp
309                               180                               185                               190
311 ggt cac tgc acc aaa atg gcc acc agg ggc agc aat ggg acc atc tgt 624
312 Gly His Cys Thr Lys Met Ala Thr Arg Gly Ser Asn Gly Thr Ile Cys
313                               195                               200                               205
315 gac aac cag agg gac tgc cag ccg ggg ctg tgc tgt gcc ttc cag aga 672
316 Asp Asn Gln Arg Asp Cys Gln Pro Gly Leu Cys Cys Ala Phe Gln Arg
317                               210                               215                               220
319 ggc ctg ctg ttc cct gtg tgc aca ccc ctg ccc gtg gag ggc gag ctt 720
320 Gly Leu Leu Phe Pro Val Cys Thr Pro Leu Pro Val Glu Gly Glu Leu
321 225                               230                               235                               240
323 tgc cat gac ccc gcc agc cgg ctt ctg gac ctc atc acc tgg gag cta 768
324 Cys His Asp Pro Ala Ser Arg Leu Leu Asp Leu Ile Thr Trp Glu Leu
325                               245                               250                               255
327 gag cct gat gga gcc ttg gac cga tgc cct tgt gcc agt ggc ctc ctc 816
328 Glu Pro Asp Gly Ala Leu Asp Arg Cys Pro Cys Ala Ser Gly Leu Leu
329                               260                               265                               270
331 tgc cag ccc cac agc cac agc ctg gtg tat gtg tgc aag ccg acc ttc 864
332 Cys Gln Pro His Ser His Ser Leu Val Tyr Val Cys Lys Pro Thr Phe
333                               275                               280                               285
335 gtg ggg agc cgt gac caa gat ggg gag atc ctg ctg ccc aga gag gtc 912
336 Val Gly Ser Arg Asp Gln Asp Gly Glu Ile Leu Leu Pro Arg Glu Val
337                               290                               295                               300
339 ccc gat gag tat gaa gtt ggc agc ttc atg gag gag gtg cgc cag gag 960
340 Pro Asp Glu Tyr Glu Val Gly Ser Phe Met Glu Glu Val Arg Gln Glu
341 305                               310                               315                               320
343 ctg gag gac ctg gag agg agc ctg act gaa gag atg gcg ctg agg gag 1008
344 Leu Glu Asp Leu Glu Arg Ser Leu Thr Glu Glu Met Ala Leu Arg Glu
345                               325                               330                               335
347 cct gcg gct gcc gcc gct gca ctg ctg gga agg gaa gag att 1050
348 Pro Ala Ala Ala Ala Ala Ala Leu Leu Gly Arg Glu Glu Ile
349                               340                               345                               350
352 <210> SEQ ID NO: 4
353 <211> LENGTH: 848

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**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/263,022

DATE: 05/07/2001

TIME: 13:18:50

Input Set : A:\Pto.amc

Output Set: N:\CRF3\05072001\I263022.raw

L:133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:1820 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:23  
L:1820 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:23  
L:1820 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1823 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:23  
L:1823 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:23  
L:1823 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1826 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:23  
L:1826 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:23  
L:1826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1829 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:23  
L:1829 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:23  
L:1829 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1853 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1853 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1853 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1856 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1856 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1856 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1859 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1859 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1859 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1862 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1862 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1862 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1865 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1865 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1865 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1868 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1868 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1868 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1871 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1871 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1871 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1874 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1874 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1874 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:2118 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:29  
L:2118 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:29  
L:2118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29  
L:2121 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:29  
L:2121 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:29  
L:2121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29  
L:2124 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:29  
L:2124 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:29  
L:2124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29  
L:2127 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:29  
L:2127 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:29

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/263,022

DATE: 05/07/2001

TIME: 13:18:50

Input Set : A:\Pto.amc

Output Set: N:\CRF3\05072001\I263022.raw

L:2127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29  
L:2188 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:34  
L:2188 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:34  
L:2188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34



1647

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/263,022

DATE: 05/07/2001  
TIME: 13:01:40

Input Set : A:\Seqlist.txt  
Output Set: N:\CRF3\05072001\I263022.raw

**Does Not Comply  
Corrected Diskette Needed**

6 <110> APPLICANT: McCarthy, Sean A.  
8 <120> TITLE OF INVENTION: NOVEL HUMAN DICKKOPF-RELATED PROTEIN AND NUCLEIC ACID  
9 MOLECULES AND USES THEREFOR  
11 <130> FILE REFERENCE: MNI-108CP2  
13 <140> CURRENT APPLICATION NUMBER: 09/263,022  
C--> 14 <141> CURRENT FILING DATE: 2000-02-26  
16 <150> PRIOR APPLICATION NUMBER: 08/843,704  
17 <151> PRIOR FILING DATE: 1997-04-16  
19 <150> PRIOR APPLICATION NUMBER: 08/842,898  
20 <151> PRIOR FILING DATE: 1997-04-17  
22 <150> PRIOR APPLICATION NUMBER: 60/071,589  
23 <151> PRIOR FILING DATE: 1998-01-15  
25 <150> PRIOR APPLICATION NUMBER: 09/009,802  
26 <151> PRIOR FILING DATE: 1998-01-20  
28 <160> NUMBER OF SEQ ID NOS: 38  
30 <170> SOFTWARE: PatentIn Ver. 2.0

#### ERRORED SEQUENCES

1163 <210> SEQ ID NO: 16  
1164 <211> LENGTH: 2380  
1165 <212> TYPE: DNA  
1166 <213> ORGANISM: Homo sapiens  
1168 <220> FEATURE:  
1169 <221> NAME/KEY: CDS  
1170 <222> LOCATION: (109)..(1155)  
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1175 gctcagcttt gttcattcga attggggcgc gccagcgcg gaacaaac atg cag cgg 117  
1176 Met Gln Arg  
1177 1  
1179 ctc ggg ggt att ttg ctg tgt aca ctg ctg gcg gcg ggc gtc ccc act 165  
1180 Leu Gly Gly Ile Leu Leu Cys Thr Leu Leu Ala Ala Val Pro Thr  
1181 5 10 15  
1183 gct cct gct cct tcc ccg acg gtc act tgg act ccg gcg gag ccg ggc 213  
1184 Ala Pro Ala Pro Ser Pro Thr Val Thr Trp Thr Pro Ala Glu Pro Gly  
1185 20 25 30 35  
1187 cca gct ctc aac tac cct cag gag gaa gct acg ctc aat gag atg ttt 261  
1188 Pro Ala Leu Asn Tyr Pro Gln Glu Glu Ala Thr Leu Asn Glu Met Phe  
1189 40 45 50  
1191 cga gag gtg gag gag ctg atg gaa gac act cag cac aaa ctg cgc agt 309  
1192 Arg Glu Val Glu Glu Leu Met Glu Asp Thr Gln His Lys Leu Arg Ser  
1193 55 60 65  
1195 gcc gtg gag gag atg gag gcg gaa gaa gca gct gct aaa acg tcc tct 357  
1196 Ala Val Glu Glu Met Glu Ala Glu Glu Ala Ala Lys Thr Ser Ser  
1197 70 75 80

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/263,022

DATE: 05/07/2001

TIME: 13:01:40

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05072001\I263022.raw

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1203 acg gag acc agg gtg gga aat aac aca gtc cat gtg cac cag gaa gtt 453
1204 Thr Glu Thr Arg Val Gly Asn Asn Thr Val His Val His Gln Glu Val
1205 100          105          110          115
1207 cac aag ata acc aac aac cag agt gga cag gtg gtc ttt tct gag aca 501
1208 His Lys Ile Thr Asn Asn Gln Ser Gly Gln Val Val Phe Ser Glu Thr
1209          120          125          130
1211 gtc att aca tct gta ggg gat gaa gaa ggc aag agg agc cat gaa tgt 549
1212 Val Ile Thr Ser Val Gly Asp Glu Glu Gly Lys Arg Ser His Glu Cys
1213          135          140          145
1215 atc att gat gaa gac tgt ggg ccc acc agg tac tgc cag ttc tcc agc 597
1216 Ile Ile Asp Glu Asp Cys Gly Pro Thr Arg Tyr Cys Gln Phe Ser Ser
1217          150          155          160
1219 ttc aag tac acc tgc cag cca tgc cgg gac cag cag atg cta tgc acc 645
1220 Phe Lys Tyr Thr Cys Gln Pro Cys Arg Asp Gln Gln Met Leu Cys Thr
1221          165          170          175
1223 cga gac agt gag tgc tgt gga gac cag ctg tgt gcc tgg ggt cac tgc 693
1224 Arg Asp Ser Glu Cys Cys Gly Asp Gln Leu Cys Ala Trp Gly His Cys
1225 180          185          190          195
1227 acc caa aag gcc acc aaa ggt ggc aat ggg acc atc tgt gac aac cag 741
1228 Thr Gln Lys Ala Thr Lys Gly Gly Asn Gly Thr Ile Cys Asp Asn Gln
1229          200          205          210
1231 agg gat tgc cag cct ggc ctg tgt tgt gcc ttc caa aga ggc ctg ctg 789
1232 Arg Asp Cys Gln Pro Gly Leu Cys Cys Ala Phe Gln Arg Gly Leu Leu
1233          215          220          225
1235 ttc ccc gtg tgc aca ccc ctg ccc gtg gag gga gag ctc tgc cat gac 837
1236 Phe Pro Val Cys Thr Pro Leu Pro Val Glu Gly Glu Leu Cys His Asp
1237          230          235          240
1239 ccc acc agc cag ctg ctg gat ctc atc acc tgg gaa ctg gag cct gaa 885
1240 Pro Thr Ser Gln Leu Leu Asp Leu Ile Thr Trp Glu Leu Glu Pro Glu
1241          245          250          255
1243 gga gct ttg gac cga tgc ccc tgc gcc agt ggc ctc cta tgc cag cca 933
1244 Gly Ala Leu Asp Arg Cys Pro Cys Ala Ser Gly Leu Leu Cys Gln Pro
1245 260          265          270          275
1247 cac agc cac agt ctg gtg tac atg tgc aag cca gcc ttc gtg ggc agc 981
1248 His Ser His Ser Leu Val Tyr Met Cys Lys Pro Ala Phe Val Gly Ser
1249          280          285          290
1251 cat gac cac agt gag gag agc cag ctg ccc agg gag gcc ccg gat gag 1029
1252 His Asp His Ser Glu Glu Ser Gln Leu Pro Arg Glu Ala Pro Asp Glu
1253          295          300          305
1255 tac gaa gat gtt ggc ttc ata ggg gaa gtg cgc cag gag ctg gaa gac 1077
1256 Tyr Glu Asp Val Gly Phe Ile Gly Glu Val Arg Gln Glu Leu Glu Asp
1257          310          315          320
1259 ctg gag cgg agc cta gcc cag gag atg gca ttt gag ggg cct gcc cct 1125
1260 Leu Glu Arg Ser Leu Ala Gln Glu Met Ala Phe Glu Gly Pro Ala Pro
1261          325          330          335
1263 gtg gag tca cta ggc gga gag gag gag att taggcccaga cccagctgag 1175

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/263,022

DATE: 05/07/2001

TIME: 13:01:40

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05072001\I263022.raw

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1264 Val Glu Ser Leu Gly Gly Glu Glu Glu Ile
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1269 ggaatggccg cagctccttc ccagtagctt ttcctctggc ttgacaagg acagtgcagt 1295
1271 acatttcttc cagccgccct gcttctctga cttgggaaag acaggcatgg cgggtaagg 1355
1273 cagcggtag tgcctcctcg ctgttgctag aaacgctgtc ttgttcttca tggatggaag 1415
1275 atttgtttga agggagagga tgggaagggg tgaagtctgc tcatgatgga ttgggggat 1475
1277 acaggagga ggaatgctgc cttgcagacg tggacttggc aaaatgtaac ctttgctttt 1535
1279 gtcttgcgcc gctcccatgg gctgaggcag tggctacaca agagctatgc tgctctgtgg 1595
1281 cctcccatat attcatcctt gtgtttcagc tcctacctca ctgtcagcac agcccttcat 1655
1283 agccacgccc cctcttgcct accacagcct agggagggac cagaggggac ttctctcaga 1715
1285 gcccctatgt ctctctctca accccatacc agcctctgtg ccagcgacag tccttccaaa 1775
1287 tggagggagt gaaatccttt ggtttaatta ttttctcctt caaggcacgc ctgccactaa 1835
1289 ggtcaggctg acttgcatgt ccctctaacg ttcgtagcag tgtggtggac actgtcttcc 1895
1291 accgactgct tcaatacctc tgaaagccag tgctcggagt gcagttcgtg taaattaatt 1955
1293 tgcaggaagt atacttggtt aattgtaggg ctaggattgt gaatgaaatt tgcaaagtcg 2015
1295 cttagcaaca atggaaagcc tttctcagtc acaccagaaa gtcacaacca agccagggtg 2075
1297 tgtagagtac agctgtgaca tacagacaga agaaggtgg gctggatgtc aggcctcaga 2135
1299 tgacggtttc aggtgccagg aactattacc attctgtatc tatccagagt tattaataatt 2195
1301 gaaagttgca cacatttgta taagcatgcc tttctcctga gttttaaatt atatgtatac 2255
1303 acaaacatgt ggccctcaaa gatcatgcac aaaccactac tctttgctaa ttcttggaact 2315
1305 tttctctttg attttcaata aatacaaacc cccttcatgc aaaaaaaaaa aaaaaggcg 2375
1307 gccgc                               2380

1907 <210> SEQ ID NO: 26
1908 <211> LENGTH: 835
1909 <212> TYPE: DNA
1910 <213> ORGANISM: Mus musculus
1912 <220> FEATURE:
1913 <221> NAME/KEY: CDS
1914 <222> LOCATION: (57)..(746)
E--> 1916 <400> SEQUENCE: 25 26
1917 gaattcggca cgaggcagaa ggcgcgaatg aaggcaaagc ctcccaccca cctgca atg 59
1918                               Met
1919                               1
1921 tgt cga ctg agg gtc ttg ctg ctg ctg ctc ccc ttg gcc ttc gtg tcc 107
1922 Cys Arg Leu Arg Val Leu Leu Leu Leu Pro Leu Ala Phe Val Ser
1923                               5                               10                               15
1925 tcc tct gct ctc ccc atc cat gat gtc gac tct cag cag aac acc tcc 155
1926 Ser Ser Ala Leu Pro Ile His Asp Val Asp Ser Gln Gln Asn Thr Ser
1927                               20                               25                               30
1929 ggg ttc ctg ggc ctt cag agg ctt ctc caa agc ttt agt cga ctg ttc 203
1930 Gly Phe Leu Gly Leu Gln Arg Leu Leu Gln Ser Phe Ser Arg Leu Phe
1931                               35                               40                               45
1933 cta aaa aat gac ctg cta cga gac ctg gac aac ttc ttc tcc tcc ccc 251
1934 Leu Lys Asn Asp Leu Leu Arg Asp Leu Asp Asn Phe Phe Ser Ser Pro
1935                               50                               55                               60                               65
1937 atg gac ttc cga gac ctt cct agg aac ttc cat cag gaa gag aac cag 299
1938 Met Asp Phe Arg Asp Leu Pro Arg Asn Phe His Gln Glu Glu Asn Gln
1939                               70                               75                               80

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## RAW SEQUENCE LISTING

DATE: 05/07/2001

PATENT APPLICATION: US/09/263,022

TIME: 13:01:41

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Output Set: N:\CRF3\05072001\I263022.raw

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1941 gag cac aga atg ggc aac cat acc ctc tcc agc cac cta cag ata gac 347
1942 Glu His Arg Met Gly Asn His Thr Leu Ser Ser His Leu Gln Ile Asp
1943      85      90      95
1945 aag gtg act gac aac cag aca ggg gag gtg cac atc tcg gag aaa gtc 395
1946 Lys Val Thr Asp Asn Gln Thr Gly Glu Val His Ile Ser Glu Lys Val
1947      100      105      110
1949 gag gcc tcc att gag cca gaa cgg aac ccg gaa ggg gac tgg aag gtt 443
1950 Glu Ala Ser Ile Glu Pro Glu Arg Asn Pro Glu Gly Asp Trp Lys Val
1951      115      120      125
1953 ccc aaa gta gaa gca aaa gag ccc ccg gtg cct gtg cag aag gtc acc 491
1954 Pro Lys Val Glu Ala Lys Glu Pro Pro Val Pro Val Gln Lys Val Thr
1955 130      135      140      145
1957 gac agc ttg cac cca gag ccc cgg cag gtg gct ttc tgg atc atg aag 539
1958 Asp Ser Leu His Pro Glu Pro Arg Gln Val Ala Phe Trp Ile Met Lys
1959      150      155      160
1961 atg cca agg cgg agg acc cag ccc gat gtc cag gat gga ggc cgc tgg 587
1962 Met Pro Arg Arg Arg Thr Gln Pro Asp Val Gln Asp Gly Gly Arg Trp
1963      165      170      175
1965 ctc ata gaa aag cga cat cgc atg cag gcc atc cgg gat ggg ctc cgt 635
1966 Leu Ile Glu Lys Arg His Arg Met Gln Ala Ile Arg Asp Gly Leu Arg
1967      180      185      190
1969 gga ggc gcc cgt gag gac agc ctg gag gat ggg gtc cat atc ccc caa 683
1970 Gly Gly Ala Arg Glu Asp Ser Leu Glu Asp Gly Val His Ile Pro Gln
1971      195      200      205
1973 cac gcc aag ctg cct gtc aga aag aca cac ttt ctc tac atc ctc agg 731
1974 His Ala Lys Leu Pro Val Arg Lys Thr His Phe Leu Tyr Ile Leu Arg
1975 210      215      220      225
1977 cca tcc caa cag ctg taagtgggga ccagatgtcc cacaccctac cccaacacca 786
1978 Pro Ser Gln Gln Leu
1979      230
1981 tatggaaata aaggttttct tacatctaaa aaaaaaaaaa aaaaaaaaaa 835

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## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/263,022

DATE: 05/07/2001

TIME: 13:01:42

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05072001\I263022.raw

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:1172 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:16 differs:26  
L:1824 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:23  
L:1824 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:23  
L:1824 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1827 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:23  
L:1827 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:23  
L:1827 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1830 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:23  
L:1830 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:23  
L:1830 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1833 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:23  
L:1833 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:23  
L:1833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1857 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1857 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1857 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1860 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1860 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1860 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1863 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1863 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1863 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1866 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1866 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1866 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1869 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1869 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1869 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1872 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1872 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1872 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1875 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1875 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1875 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1878 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24  
L:1878 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24  
L:1878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:1916 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:26 differs:25  
L:2122 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:29  
L:2122 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:29  
L:2122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29  
L:2125 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:29  
L:2125 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:29  
L:2125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29  
L:2128 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:29  
L:2128 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:29

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/263,022

DATE: 05/07/2001

TIME: 13:01:42

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05072001\I263022.raw

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L:2131 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:29  
L:2131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29  
L:2192 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:34  
L:2192 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:34  
L:2192 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34